Binary_Tree 2

Read the given scenario and implement a program.

Given a sorted array. Write a program that creates a Balanced Binary Search Tree using array elements. If there are n elements in array, then floor(n/2)'th element should be chosen as root and same should be followed recursively.

Input Format

The first line of input contains an integer T denoting the number of test cases.

The first line of each test case is N,N is the size of array.

The second line of each test case contains N input A[ ].

Constraints

1< = T <= 100

1< = N <= 1000

1 <= A[ ] <= 10000

Output Format

Print the preorder traversal of constructed BST.

Sample Input 0

```
1
7
1 2 3 4 5 6 7
```

Sample Output 0

```
4 2 1 3 6 5 7
```

Sample Input 1

```
1
5
1 2 3 4 5
```

Sample Output 1

```
3 1 2 4 5
```

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